

WHAT IS CLAIMED IS:

- 1 1. A computer-implemented method for reviewing tooth
2 arrangements, said method comprising:
3 maintaining a digital data set representing a three-dimensional graphical
4 representation of a patient's teeth in a host computer;
5 electronically transmitting the digital data set to a viewing computer;
6 displaying the three-dimensional graphical representation on the viewing
7 computer to a treating clinician; and
8 electronically transmitting changes to the graphical representation or
9 comments of the treating clinician from the viewing computer to the host computer.
- 1 2. A method as in claim 1, wherein the digital data set represents the
2 teeth in a reconfigured arrangement.
- 1 3. A method as in claim 2, wherein the digital data set represents a
2 final tooth configuration to be achieved by orthodontic treatment.
- 1 4. A method as in claim 3, further comprising maintaining a second
2 digital data set representing a three-dimensional graphical representation of the patient's
3 teeth in an initial arrangement on the host computer, electronically transmitting the
4 second digital data set to the viewing computer, and displaying the three-dimensional
5 graphical representation of the patient's teeth in the initial arrangement on the viewing
6 computer to the treating clinician.
- 1 5. A method as in claim 4, wherein the graphical representations of
2 the teeth in the final and initial configurations are displayed side-by-side on a display of
3 the viewing computer.
- 1 6. A method as in claim 1, wherein the digital data set represents a
2 series of intermediate configurations from an initial tooth configuration to a final
3 arrangement.
- 1 7. A method as in claim 6, wherein the digital data set is displayed as
2 an animated routine.

1 8. A method as in claim 7, wherein the treating clinician manipulates
2 the animation routine on the viewing computer to step forward or backward through
3 images along a treatment path.

1 9. A method as in claim 1, wherein the host computer is remote from
2 the viewing computer.

1 10. A method as in claim 9, wherein transmitting data between the host
2 computer and the viewing computer is performed over a direct connection.

1 11. A method as in claim 9, wherein transmitting data between the host
2 computer and the viewing computer is performed over the world wide web.

1 12. A computer-implemented method as in claim 1, further comprising
2 altering a three-dimensional image displayed on the viewing computer, wherein the
3 altered image may be electronically transmitted to the host computer.

1 13. A computer-implemented method as in claim 12, further
2 comprising detecting tooth collisions resulting from the altered image and altering the
3 treating clinician.

1 14. A computer-implemented method as in claim 1, wherein
2 electronically transmitting comments comprises sending textual messages.

1 15. A method as in claim 1, further comprising revising the digital data
2 set on the host computer to incorporate changes suggested by the treating clinician to
3 produce a revised digital data set.

1 16. A method as in claim 15, further comprising electronically
2 transmitting the revised digital data set to the viewing computer, displaying a revised
3 three-dimensional graphical representation on the viewing computer to the treating
4 clinician, and electronically transmitting further changes to the graphical representation or
5 comments of the treating clinician from the viewing computer to the host computer.

1